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EXAMINER	
RIES, LAURIE ANNE	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/516,898	CARR ET AL.	
	Examiner	Art Unit	
	LAURIE RIES	2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 April 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-33 and 36-38* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6, 8-17, 19-33 and 36-38* is/are rejected.

7)☒ Claim(s) *7 and 18* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *03 December 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *4/14/09*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to communications: Amendment, filed 14 April 2009, and IDS, filed 14 April 2009, to the Original Application, filed 15 August 2005.

2. Claims 1-33 and 36-38 are pending. Applicant has cancelled claims 34-35. Claims 1, 14, 29, 30, 31, 32, 33, 34, and 36-38 are independent claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-2, 4-6, 8-11, 13, 29-30, 32, 36, and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ehring (U.S. Publication 2005/0097008 A1) in view of Helgeson (U.S. Publication 2002/0049749 A1).

As per independent claim 1, Ehring teaches an apparatus for automatically building an electronic form for presentation to a user during a data capture process (See

Ehring, paragraph 0063, describing a dynamic composition engine including managers that organize components in an electronic page or form) including a means for receiving as input data elements required during data capture, each data element having a type specification, and a logical relationship relative to other data elements in a hierarchical structure (See Ehring, paragraphs 0127-0130, describing receiving as input a specification of data elements in the form of application rules that are interpreted throughout all subsequent steps of the process by the appropriate managers, and a logical relationship relative to other data elements, in that the managers determine the next page or data element to be displayed based upon the particular application rules being interpreted).

Ehring also teaches a means automatically generating a plurality of visual displays for presentation to a user during execution of a data capture process, each visual display having an automatically determined form layout (See Ehring, paragraphs 0130-0132, describing rendering a number of visual displays for presentation to a user during execution of a data capture process) comprising a plurality of user input areas corresponding to the data elements (See Ehring, paragraphs 0063 and 0189, describing fields within an online application form), in which the form layout and physical positioning of the user input areas on each display are determined, during runtime of the data capture process from information in the data capture definition file, in a manner corresponding to the defined logical hierarchical structure (See Ehring, paragraphs 0061-0063, describing positioning and rendering data, such as user input areas on the

form described in Ehring paragraph 0189, during runtime of the data capture process from the data definition file).

Ehring does not teach expressly that the input is a self-contained platform-independent data capture definition file.

Helgeson teaches a DTD (document type definition) in XML that is platform-independent and self-contained (See Helgeson, Pages 69-70, paragraph 1057, Pages 1-2, paragraphs 0015-0016, and Page 62, paragraph 0872, noting specifically the description of a simple case where the XML to export contains no external references to objects in the source system which are not contained in the generated XML).

Ehring and Helgeson are analogous art because they are from the same field of endeavor of generating electronic documents using XML.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include the XML-based platform-independent self-contained document type definition of Helgeson with the input specification of Ehring. The motivation for doing so would have been to allow objects to be extracted from the XML specification file directly and transformed into a specific format for a specific platform (See Helgeson, Page 62, paragraph 0871).

Therefore, it would have been obvious to combine Helgeson with Ehring for the benefit of allow objects to be extracted from the XML specification file directly and transformed into a specific format for a specific platform to obtain the invention as specified in claim 1.

As per dependent claim 2, Ehring and Helgeson teach the limitations of claim 1 as described above. Ehring also teaches that the data capture definition file is in XML format (See Ehring, paragraphs 0060-0061).

As per dependent claim 4, Ehring and Helgeson teach the limitations of claim 1 as described above. Ehring also teaches that the data capture definition file further includes a functional specification of rule-based actions to be taken during execution of the data capture process, the means for generating further including means for executing the rule-based actions during the data capture process, and determining successive visual displays for presentation to the user during the data capture process according to values of data captured and the rule-based actions applicable thereto (See Ehring, paragraphs 0066-0067).

As per dependent claim 5, Ehring and Helgeson teach the limitations of claim 1 as described above. Ehring also teaches that the data capture definition file further includes a functional specification of a data model defining the bindings of data elements with an output message format (See Ehring, paragraphs 0177-0178).

As per dependent claim 6, Ehring and Helgeson teach the limitations of claim 1 as described above. Ehring also teaches that the data capture definition file further includes a functional specification of data exchange requirements according to a form definition standard (See Ehring, paragraphs 0043, 0061, and 0081-0084).

As per dependent claim 8, Ehring and Helgeson teach the limitations of claim 4 as described above. Ehring also teaches means for generating the data capture definition file which further includes means for incorporating the rule-based actions to be

performed during execution of the data capture process, by a rule builder interface that enables rule actions and conditions to be assigned to data capture events (See Ehring, paragraphs 0063-0066).

As per dependent claim 9, Ehring and Helgeson teach the limitations of claim 1 as described above. Ehring also teaches that the means for generating the data capture definition file which further includes binding interface means for incorporating binding definitions into the data capture definition file, each binding definition defining the binding of a data element to a defined external data model (See Ehring, paragraphs 0134-0135).

As per dependent claim 10, Ehring and Helgeson teach the limitations of claim 1 as described above. Ehring also teaches a means for ensuring that the specification of data elements complies with a form definition standard (See Ehring, paragraphs 0043 and 0061).

As per dependent claim 11, Ehring and Helgeson teach the limitations of claim 1 as described above. Ehring also teaches a means for generation a succession of visual displays for presentation to a user, the physical layout of the visual displays being determined during execution of the data capture process, according to the defined data elements and their hierarchical structure in the data capture definition file, and according to process and display conditions prevailing in the platform executing the data capture process (See Ehring, paragraphs 0127-0130).

As per dependent claim 13, Ehring and Helgeson teach the limitations of claim 11 as described above. Ehring also teaches that the means for executing the data

capture process further includes means for executing rule-based actions according to a functional specification of rule-based actions defined in the data capture definition file (See Ehring, paragraphs 0066-0067).

As per independent claim 29, Ehring discloses an apparatus for generating an electronic form for presentation to a user during a data capture process (See Ehring, paragraph 0063, describing a dynamic composition engine including managers that organize components in an electronic page or form). Independent claim 29 additionally incorporates substantially similar subject matter as that of independent claim 1 above, and is additionally rejected along the same rationale as used in the rejection of claim 1.

As per independent claim 30, Ehring discloses a computerized method of automatically building an electronic form for presentation to a user during a data capture process (See Ehring, paragraph 0063, describing a dynamic composition engine including managers that organize components in an electronic page or form). Independent claim 30 additionally incorporates substantially similar subject matter as that of independent claim 1 above, and is additionally rejected along the same rationale as used in the rejection of claim 1.

As per independent claim 32, Ehring discloses a computerized method of automatically building an electronic form for presentation to a user during a data capture process (See Ehring, paragraph 0063, describing a dynamic composition engine including managers that organize components in an electronic page or form). Independent claim 32 additionally incorporates substantially similar subject matter as

that of independent claim 1 above, and is additionally rejected along the same rationale as used in the rejection of claim 1.

As per independent claim 36, Ehring discloses an apparatus for automatically building an electronic form for presentation to a user during a data capture process (See Ehring, paragraph 0063, describing a dynamic composition engine including managers that organize components in an electronic page or form). Independent claim 36 additionally incorporates substantially similar subject matter as that of independent claim 1 above, and is additionally rejected along the same rationale as used in the rejection of claim 1.

As per independent claim 38, Ehring discloses an apparatus for generating an electronic form for presentation to a user during a data capture process (See Ehring, paragraph 0063, describing a dynamic composition engine including managers that organize components in an electronic page or form). Independent claim 38 additionally incorporates substantially similar subject matter as that of independent claim 1 above, and is additionally rejected along the same rationale as used in the rejection of claim 1.

4. Claims 3, 12, 14-17, 19-20, 25-28, 31, 33, and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ehring (U.S. Publication 2005/0097008 A1) in view of Helgeson (U.S. Publication 2002/0049749 A1), as applied to claims 1 and 11 above, and further in view of Wolff (U.S. Patent 5,774,887).

As per dependent claim 3, Ehring and Helgeson teach the limitations of claim 1 as described above. Ehring and Helgeson do not teach expressly including a functional specification of data validation operations to be performed in respect of at least some of the data elements during execution of the data capture process, the means for receiving further including means for executing the data validation operations during the data capture process. Wolff teaches a functional specification of data validation operations to be performed in respect of at least some of the data elements during execution of the data capture process and means for executing the data validation operations during the data capture process (See Wolff, Figure 4, showing various checks on data completion, such as element 220 and 222, and Column 6, lines 28-38, describing an indication of an invalid data entry). Ehring, Helgeson, and Wolff are analogous art because they are from the same field of endeavor of generating electronic documents. At the time of the invention it would have been obvious to one of ordinary skill in the art to include the data validation specification and execution of data validation of Wolff with the data capture process and functional specification of Ehring and Helgeson. The motivation for doing so would have been to ensure that the user enters the correct data such that a reliable and expected data value will result and data errors may be avoided. Therefore, it would have been obvious to combine Wolff with Ehring and Helgeson for the benefit of ensuring that the user enters the correct data such that a reliable and expected data value will result and data errors may be avoided to obtain the invention as specified in claim 3.

As per dependent claim 12, Ehring and Helgeson teach the limitations of claim 11 as described above. Ehring and Helgeson do not teach expressly including a means for executing data validation operations according to a functional specification of data validation operations defined in the data capture definition file. Wolff teaches a functional specification of data validation operations to be performed in respect of at least some of the data elements during execution of the data capture process and means for executing the data validation operations during the data capture process (See Wolff, Figure 4, showing various checks on data completion, such as element 220 and 222, and Column 6, lines 28-38, describing an indication of an invalid data entry). Ehring, Helgeson, and Wolff are analogous art because they are from the same field of endeavor of generating electronic forms. At the time of the invention it would have been obvious to one of ordinary skill in the art to include the data validation specification and execution of data validation of Wolff with the data capture process and functional specification of Ehring and Helgeson. The motivation for doing so would have been to ensure that the user enters the correct data such that a reliable and expected data value will result and data errors may be avoided. Therefore, it would have been obvious to combine Wolff with Ehring and Helgeson for the benefit of ensuring that the user enters the correct data such that a reliable and expected data value will result and data errors may be avoided to obtain the invention as specified in claim 12.

As per independent claim 14, Ehring teaches an for generating a data capture definition file for defining data elements required from a user during a data capture process (See Ehring, paragraph 0063, describing a dynamic composition engine

including managers that organize components in an electronic page or form) including a means for receiving as input a specification of data elements required during data capture, each data element having a type specification, and a logical relationship relative to other data elements in a hierarchical structure (See Ehring, paragraphs 0127-0130, describing receiving as input a specification of data elements in the form of application rules that are interpreted throughout all subsequent steps of the process by the appropriate managers, and a logical relationship relative to other data elements, in that the managers determine the next page or data element to be displayed based upon the particular application rules being interpreted).

Ehring also teaches the type specifications and the hierarchical structure being usable for automatically determining a physical layout of visual displays for presentation to a user during a subsequent data capture process (See Ehring, paragraphs 0130-0132, describing rendering data elements from a data capture definition file, such as a template, in a predetermined format).

Ehring also teaches a means for associating, with the data elements, a set of rules for execution during a subsequent data capture process, for further enabling automatic determination of a physical layout of the visual displays to be presented to a user during the subsequent data capture process based on values of data captured during the data capture process (See Ehring, paragraphs 0061-0066, describing determining the layout of data elements based on user input).

Ehring also teaches a means for generating the data capture definition file defining the specification of data elements, the hierarchical structure, the data validation

requirements and the set of rules in a predetermined format for subsequent execution by a data capture process (See Ehring, Figure 8, element 1092, and paragraph 0135, describing updating the user profile and behavior database and aggregate information database based on user input).

Ehring does not teach expressly associating, with the data elements, a set of data validation requirements for validating data captured in respect of each of the data elements.

Wolff teaches associating data validation requirements for validating data captured with the data elements (See Wolff, Figure 4, showing various checks on data completion, such as element 220 and 222, and Column 6, lines 28-38, describing an indication of an invalid data entry).

Ehring also does not teach expressly that the input is a self-contained platform-independent data capture definition file.

Helgeson teaches a DTD (document type definition) in XML that is platform-independent and self-contained (See Helgeson, Pages 69-70, paragraph 1057, Pages 1-2, paragraphs 0015-0016, and Page 62, paragraph 0872, noting specifically the description of a simple case where the XML to export contains no external references to objects in the source system which are not contained in the generated XML).

Ehring, Helgeson and Wolff are analogous art because they are from the same field of endeavor of generating electronic documents.

At the time of the invention it would have been obvious to one of ordinary skill in the art to include the data validation of Wolff with the data capture process and

functional specification of Ehring. The motivation for doing so would have been to ensure that the user enters the correct data such that a reliable and expected data value will result and data errors may be avoided.

At the time of the invention it would also have been obvious to one of ordinary skill in the art to include the XML-based platform-independent self-contained document type definition of Helgeson with the input specification of Ehring. The motivation for doing so would have been to allow objects to be extracted from the XML specification file directly and transformed into a specific format for a specific platform (See Helgeson, Page 62, paragraph 0871).

Therefore, it would have been obvious to combine Wolff and Helgeson with Ehring for the benefit of ensuring that the user enters the correct data such that a reliable and expected data value will result and data errors may be avoided, and for the benefit of allow objects to be extracted from the XML specification file directly and transformed into a specific format for a specific platform, to obtain the invention as specified in claim 14.

As per dependent claim 15, Ehring, Helgeson, and Wolff teach the limitations of claim 14 as described above. Ehring also teaches that the data capture definition file conforms to a standard that can be executed on a plurality of different platforms, such as by coding the data capture definition in XML (See Ehring, paragraph 0152).

As per dependent claim 16, Ehring, Helgeson, and Wolff teach the limitations of claim 15 as described above. Ehring also teaches that the data capture definition file is generated in XML format (See Ehring, paragraph 0152).

As per dependent claim 17, Ehring, Helgeson, and Wolff teach the limitations of claim 14 as described above. Ehring also teaches a means for incorporating, in the data capture definition file, a functional specification of data exchange requirements according to a form definition standard (See Ehring, paragraphs 0043, 0061, and 0081-0084).

As per dependent claim 19, Ehring, Helgeson, and Wolff teach the limitations of claim 14 as described above. Claim 19 additionally incorporates substantially similar subject matter as that of claim 9 above, and is additionally rejected along the same rationale as used in the rejection of claim 9.

As per dependent claim 20, Ehring, Helgeson, and Wolff teach the limitations of claim 14 as described above. Claim 20 additionally incorporates substantially similar subject matter as that of claim 10 above, and is additionally rejected along the same rationale as used in the rejection of claim 10.

As per dependent claim 25, Ehring, Helgeson, and Wolff teach the limitations of claim 14 as described above. Wolff also teaches a document validation model for ensuring compliance of a generated data capture definition file with at least one of a form definition standard, a function definition standard and a data model standard (See Wolff, Figure 4, and Column 6, lines 28-38). Ehring, Helgeson, and Wolff are analogous art because they are from the same field of endeavor of generating electronic documents. At the time of the invention it would have been obvious to one of ordinary skill in the art to include the document validation model of Wolff with the data capture process and functional specification of Ehring, Helgeson, and Wolff. The motivation for

doing so would have been to ensure that the user enters the correct data such that a reliable and expected data value will result and data errors may be avoided. Therefore, it would have been obvious to combine Wolff with Ehring, Helgeson, and Wolff for the benefit of ensuring that the user enters the correct data such that a reliable and expected data value will result and data errors may be avoided to obtain the invention as specified in claim 25.

As per dependent claim 26, Ehring, Helgeson, and Wolff teach the limitations of claim 14 as described above. Ehring also teaches that means for generating the data capture definition file further includes means for associating each data element with a respective section or sub-section in the logical hierarchical structure (See Ehring, paragraph 0130).

As per dependent claim 27, Ehring and Helgeson teach the limitations of claim 11 as described above. Ehring and Helgeson do not teach expressly that the means for generating a succession of visual displays further comprises a means for inferring a relative physical positioning of user prompts for data element capture and a sequential progression of user prompts for data element capture from the data capture definition file and a means for determining absolute physical positioning of user prompts and presentation styles thereof according to criteria defined in the means for executing the data capture process, and not the data capture definition file. Wolff teaches generating a succession of visual displays that include inferring a relative physical positioning of user prompts for data element capture and a means to determine the absolute physical position of the user prompts (See Wolff, Figure 4, showing various checks on data

completion, such as element 220 and 222, and Column 6, lines 28-38, describing an indication of an invalid data entry). Ehring, Helgeson, and Wolff are analogous art because they are from the same field of endeavor of generating electronic documents. At the time of the invention it would have been obvious to one of ordinary skill in the art to include the data validation specification and execution of data validation of Wolff with the data capture process and functional specification of Ehring and Helgeson. The motivation for doing so would have been to ensure that the user enters the correct data such that a reliable and expected data value will result and data errors may be avoided. Therefore, it would have been obvious to combine Wolff with Ehring and Helgeson for the benefit of ensuring that the user enters the correct data such that a reliable and expected data value will result and data errors may be avoided to obtain the invention as specified in claim 27.

As per dependent claim 28, Ehring and Wolff teach the limitations of claim 27 as described above. Ehring also teaches means for generating the data capture definition file in which the means for generating said data capture definition file and the means for generating a succession of visual displays operate on different computing platforms (See Ehring, paragraph 0131).

As per independent claim 31, Ehring teaches a method of generating a data capture definition file for defining data elements required from a user during a data capture process (See Ehring, paragraph 0063, describing a dynamic composition engine including managers that organize components in an electronic page or form). Independent claim 31 additionally incorporates substantially similar subject matter as

that of independent claim 14 above, and is additionally rejected along the same rationale as used in the rejection of claim 14.

As per independent claim 33, Ehring teaches a computer program product, comprising a tangible computer readable medium having thereon computer program code adapted, when said computer program code is loaded onto a computer, to make the computer execute the procedure of any one of claims 30 to 32 (See Ehring, Figure 2).

As per independent claim 37, Ehring teaches an apparatus for generating a data capture definition file for defining data elements required from a user during a data capture process (See Ehring, paragraph 0063, describing a dynamic composition engine including managers that organize components in an electronic page or form). Independent claim 37 additionally incorporates substantially similar subject matter as that of independent claim 14 above, and is additionally rejected along the same rationale as used in the rejection of claim 14.

5. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ehring (U.S. Publication 2005/0097008 A1) in view of Helgeson (U.S. Publication 2002/0049749 A1) and Wolff (U.S. Patent 5,774,887), as applied to claim 14 above, and further in view of Ravishankar (U.S. Patent 7,346,840).

As per dependent claim 21, Ehring, Helgeson, and Wolff teach the limitations of claim 14 as described above. Ehring, Helgeson, and Wolff do not teach expressly means for assigning, to each data capture definition file, document ownership and execution rights. Ravishankar teaches assigning access and execution rights by means of incorporating subscriber attributes. Ehring, Helgeson, Wolff and Ravishankar are analogous art because they are from the same field of endeavor of generating electronic documents. At the time of the invention it would have been obvious to one of ordinary skill in the art to include the ownership and execution rights of Ravishankar with the data capture definition file of Ehring, Helgeson, and Wolff. The motivation for doing so would have been to ensure that the proper personnel are entering data, thus protecting any possible sensitive data or information. Therefore, it would have been obvious to combine Ravishankar with Ehring, Helgeson, and Wolff for the benefit of ensuring that the proper personnel are entering data, thus protecting any possible sensitive data or information, to obtain the invention as specified in claim 21.

6. Claims 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ehring (U.S. Publication 2005/0097008 A1) in view of Helgeson (U.S. Publication 2002/0049749 A1) and Wolff (U.S. Patent 5,774,887), as applied to claim 14 above, and further in view of Hanson ("Saving Time With Global Templates"), hereafter referred to as "Hanson".

As per dependent claim 22, Ehring, Helgeson, and Wolff teach the limitations of claim 14 as described above. Ehring, Helgeson, and Wolff do not teach expressly the automatic copying of a global template. Hanson teaches using global templates, such as to generate code (See Hanson, Page 1). Ehring, Helgeson , Wolff and Hanson are analogous art because they are from the same field of endeavor of generating electronic data. At the time of the invention it would have been obvious to one of ordinary skill in the art to generate the data capture definition file of Ehring, Helgeson, and Wolff using global templates as taught by Hanson. The motivation for doing so would have been to customize the style of the various data capture elements over multiple forms such that the forms maintain continuity. Therefore, it would have been obvious to combine Hanson with Ehring, Helgeson, and Wolff for the benefit of customizing the style of the various data capture elements over multiple forms such that the forms maintain continuity to obtain the invention as specified in claim 22.

As per dependent claim 23, Ehring, Helgeson , Wolff and Hanson teach the limitations of claim 22 as described above. While Ehring, Helgeson , Wolff and Hanson do not teach expressly correlating changes made in global templates with relevant parts of data capture definition files that have been built using those templates, it was well known in the art that changes made to a global template would include changes made to components of the said template, including any data elements included in the global template. It would have been obvious to one of ordinary skill in the art to correlate changes made in a global template with relevant parts of a data capture definition file,

providing the benefit of maintaining continuity of the data elements across multiple forms.

7. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ehring (U.S. Publication 2005/0097008 A1) in view of Helgeson (U.S. Publication 2002/0049749 A1), Wolff (U.S. Patent 5,774,887) and Hanson ("Saving Time With Global Templates"), hereafter referred to as "Hanson", as applied to claim 23 above, and further in view of "Getting Started With Oracle Change Management Pack", hereafter referred to as "Oracle".

As per dependent claim 24, Ehring, Helgeson, Wolff and Hanson teach the limitations of claim 23 as described above. Ehring, Helgeson, Wolff and Hanson do not teach expressly means for generating an impact analysis report identifying potential consequences to relevant data capture definition files resulting from a proposed change to a template. Oracle teaches using Oracle Change Management Pack to generate a script and an impact report for data capture. Ehring, Helgeson, Wolff, Hanson, and Oracle are analogous art because they are from the same field of endeavor of generating electronic data. At the time of the invention it would have been obvious to one of ordinary skill in the impact report of Oracle with the data capture definition file of Ehring, Helgeson, Wolff and Hanson. The motivation for doing so would have been to determine whether the changes to the data definition are feasible, thus allowing the user

to determine whether to proceed with the changes. Therefore, it would have been obvious to combine Oracle with Ehring, Helgeson, Wolff and Hanson for the benefit of determining whether the changes to the data definition are feasible, thus allowing the user to determine whether to proceed with the changes, to obtain the invention as specified in claim 24.

Allowable Subject Matter

8. Claims 7 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance:

The closest prior art of record, namely Ehring, fails to teach or reasonably suggest the combination of limitations of the claimed invention. For example, Ehring fails to teach or reasonably suggest a means for generating the data capture definition file which further includes means for enabling automatic building of portions of said data capture definition file according to a form definition standard.

Response to Arguments

9. Applicant's arguments filed 14 April 2009 have been fully considered but they are not persuasive.

Applicant argues that Ehring fails to teach or reasonably suggest an apparatus or process that automatically determines both a form layout for a visual display and a physical positioning of the user input areas on such a display. The Office respectfully disagrees. Ehring teaches that the user enters in conditions, or rules, which are used by the system to automatically determine the layout of the electronic form (See Ehring, Paragraph 0075, stating that the system can determine dynamically (and automatically), despite the existence of a large number of combinations of potential web pages (often exceeding millions of combinations for even moderately complex applications), which content objects to display to particular users (including conversion of such content objects into actual HTML web pages)). Likewise, Ehring teaches placement or positioning of said content objects on the display (See Ehring, paragraph 0063, stating that the dynamic content composition engine contains five managers that perform several automated layout tasks, including but not limited to how dynamically selected components are laid out or organized on a web page).

Applicant's arguments with respect to the supposed failure of Ehring to teach or reasonably suggest that automatic determination performed by the system is based on a logical hierarchical structure defined in a self-contained and platform-independent

data capture definition file have been considered but are moot in view of the new ground(s) of rejection.

Applicant argues that Ehring is not enabling and cannot serve as a basis for a prior art rejection. The Office respectfully disagrees. Ehring clearly defines and discloses a method for automated adaptive rendering of web-based forms, as shown in Ehring, Figures 9-12, describing the various managers that comprise the dynamic content composition engine, and paragraphs 0137 through 0178 which describe in detail the functionality of said managers, thus enabling one of ordinary skill in the art to practice the claimed subject matter.

Applicant argues that Ehring fails to teach or reasonably suggest a functional specification of rule-based actions to be taken during execution of the data capture process, as recited in dependent claim 4. The Office respectfully disagrees. Ehring teaches actions to be taken which are determined by various rules as interpreted by a scenario manager (See Ehring, paragraph 0068).

Applicant argues that Ehring fails to teach or reasonably suggest the data capture file including a functional specification of a data model defining the bindings of data elements with an output message format, as recited in dependent claim 5. The Office respectfully disagrees. Ehring teaches binding data elements, such as various form fields, with the display of help text or other output messages as determined by a behavior manager function (See Ehring, paragraphs 0177-0178).

Applicant argues that Ehring fails to teach or reasonably suggest the data capture definition file including a functional specification of data exchange requirements

according to a form definition standard, as recited in claim 6. The Office respectfully disagrees. Ehring teaches a number of templates, or form definition standards, which determine which data elements are required for display based on the template as well as the type of user identified by the system (See Ehring, Paragraph 0081-0084)

Applicant's arguments, see Amendment, filed 14 April 2009, with respect to claim 7 have been fully considered and are persuasive. The rejection of claim 6 has been withdrawn.

Applicant argues that Ehring fails to teach or reasonably suggest a means for generating the data capture definition file which further includes means for incorporating said rule-based actions to be performed during execution of the data capture process, by a rule builder interface that enables rule actions and conditions to be assigned to data capture events, as recited in dependent claim 8. The Office respectfully disagrees. Ehring teaches a behavior manager that assigns various actions based on predefined rules to data capture events, including but not limited to determining which links are included on a page (See Ehring, paragraphs 0065-0066).

Applicant argues that Ehring fails to teach or reasonably suggest incorporating binding definitions into a self-contained platform-independent data capture file, as recited in dependent claim 9. The Office respectfully disagrees. Ehring teaches a composition engine that extracts relevant user behavior information and binds them into higher level variables that are resolved according to application rules (See Ehring, Paragraph 0135).

Applicant argues that Ehring fails to teach or reasonably suggest ensuring that a specification of data elements in a data capture definition file complies with a form definition standard, as recited in dependent claim 10. The Office respectfully disagrees. Ehring teaches that the specification of data elements complies with various form definition standards, or templates, that determine the appropriate data elements to be included on a page(See Ehring, paragraphs 0043 and 0061).

Applicant argues that Ehring fails to teach or reasonably suggest that the layout of each of the succession of displays is determined according to the elements and their hierarchical structure defined in the data capture definition file, as recited in dependent claim 11. The Office respectfully disagrees. Ehring teaches that the display of data elements is determined by a hierarchical structure, such as a field schema, or pre-generated field definitions for various types of predefined objects (See Ehring, paragraph 0074).

Applicant argues that Ehring fails to teach or reasonably suggest rule-based actions that are defined in a self-contained platform-independent data capture definition file, as recited in dependent claim 13. This argument has been fully considered but is moot in view of the new ground(s) of rejection.

Applicant's arguments with regard to the rejection of claims 3, 12, 14-28, 31, 33, and 37 have been fully considered but are moot in view of the new ground(s) of rejection.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laurie Ries whose telephone number is (571) 272-4095. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doug Hutton, can be reached at (571) 272-4137.

12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Laurie Ries/
Primary Examiner
Technology Center 2100
2 June 2009